



PATENT

Case Docket No. IMEC210.001AUS

Date: September 12, 2001

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Deneire, et al.  
Appl. No. : 09/871,571  
Filed : May 30, 2001  
For : METHOD AND  
APPARATUS FOR  
CHANNEL ESTIMATION  
Examiner : Unknown  
Group Art Unit : 2661

I hereby certify that this correspondence and all  
marked attachments are being deposited with the  
United States Postal Service as first class mail in an  
envelope addressed to: Assistant Commissioner for  
Patents, Washington, D.C. 20231, on

September 12, 2001

(Date)

Mark M. Abumeri, Reg. No. 43,458

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## TRANSMITTAL LETTER

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231  
ATTENTION: APPLICATION BRANCH

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 with four (4) references.
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Mark M. Abumeri  
Registration No. 43,458  
Attorney of Record

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INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Enclosed is form PTO-1449 listing four (4) references that are also enclosed. This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: September 12, 2001

By: 

Mark M. Abumeri  
Registration No. 43,458  
Attorney of Record  
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Sixteenth Floor  
Newport Beach, CA 92660  
(619) 235-8550

ATTY. DOCKET NO.  
IMEC210.001AUS

APPLICATION NO.  
09/871,571

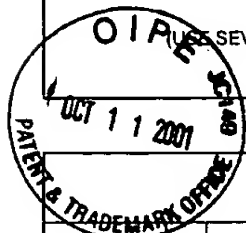
### INFORMATION DISCLOSURE STATEMENT BY APPLICANT

APPLICANT  
Deneire, et al.

FILING DATE  
May 30, 2001

GROUP  
2661

(USE SEVERAL SHEETS IF NECESSARY)



## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	Edfors, O., et al. "OFDM Channel Estimation by Singular Value Decomposition", IEEE Transactions on Communications, 46(7):931-939, (July, 1998).
	He, S., et al., "Computing Partial DFT for Comb Spectrum Evaluation", IEEE Signal Processing Letters, 3(8): 173-175, (June, 1996).
	Jones, V.K., et al., "Channel Estimation for Wireless OFDM Systems", IEEE Global Telecommunications Conference, 2:980-985, (November, 1998).
	Raleigh, G.G., et al., "Multivariate Modulation and Coding for Wireless Communication", IEEE Journal on Selected Areas in Communications", 17(5) 851-866, (May 1999).

EXAMINER	DATE CONSIDERED
<p><b>*EXAMINER:</b> INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.</p>	